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(Abuziarova, R. Y.) 5(1-4): 269-277

**Asia—Stratigraphy**

**Neogene:** Palynostratigraphy of the non-marine Neogene in North Asia  
(Volkova, V. S., et al.) 48(4): 415-424

**Tertiary:** The Tertiary flora of Southeast Asia with remarks on its palaeoenvironment and phytogeography of the Indo-Malayan region  
(Bande, M. B., et al.) 49(3-4): 203-233

**Associations—Stratigraphy**

**International Commission for Microflora of the Paleozoic:** The C.I.M.P. struggles for better stratigraphic usage for palynology  
(Alpern, B.) 1(1-4): 69-74

**Atlantic Ocean** *see also* North Sea

**Atlantic Ocean—Paleobotany**

**Palynomorphs:** A reappraisal of the Cainozoic dinoflagellate cyst "Hystrichosphaeridium" choanophorum Deflandre et Cookson 1955  
(Harland, R., et al.) 28(1): 37-45

— Quaternary (Flandrian?) dinoflagellate cysts from the Grand Banks, off Newfoundland, Canada  
(Harland, R.) 16(4): 229-242

— Two new Tertiary dinocyst genera from the Norwegian Sea; *Lophocysta* and *Evittosphaerula*  
(Manum, S. B.) 28(3-4): 237-248

**Atlantic Ocean—Stratigraphy**

*Quaternary*: Palynology of six ocean-bottom cores from the southwestern Atlantic Ocean  
(Stanley, E. A.) 2(1-4): 195-203

**Atlantic region** *see also* the individual countries

**Australasia—Paleobotany**

*Plantae*: Palynological information from late Pliocene-Pleistocene deposits recovered by deep-sea drilling in the region of the island of Timor  
(Zaklinskaya, E. D.) 26(1-4): 227-241

**Australia** *see also* New South Wales; Queensland; South Australia; Western Australia

**Australia—Paleobotany**

*Angiosperms*: Evidence of lid-cells and host-specific microfungi in the search for Tertiary Eucalyptus  
(Lange, R. T.) 29(1-2): 29-33

**Austria—Paleobotany**

*Palynology*: Current research in paleobotany and palynology at the University of Vienna  
(Klaus, W.) 23(4): 303-330

**Austria—Stratigraphy**

*Holocene*: A palynological investigation in the Pannonian climate region of Lower Austria  
(Havinga, A. J.) 14(3-4): 319-352

**Triassic**: A scheme of palynologically defined concurrent range zones and subzones for the Triassic Rhaetian stage (sensu lato)

(Morbey, S. J., et al.) 17(1-2): 161-173

— Aspects of Late Triassic palynology; 3, Palynology of latest Triassic and earliest Jurassic deposits of the northern Limestone Alps in Austria and southern Germany, with special reference to a palynological characterization of the Rhaetian Stage in Europe

(Schuurman, W. M. L.) 27(1): 53-75

**Automatic data processing** *see* Data processing

**Azores** *see also* Portugal

**Bahamas—Sedimentary petrology**

*Sediments*: Pollen and associated microfossils in the marine surface sediments of the Great Bahama Bank  
(Traverse, A., et al.) 3(1-4): 243-254

**Baltic region** *see also* the individual countries

**Belgium—Paleobotany**

*Palynomorphs*: Spore assemblages of Famennian, Strunian and Tournaisian stratotypes in the Ardennes and Rhenish basins; preliminary note  
(Strel, M.) 5(1-4): 63-74

— Dinoflagellates and acritarchs from the Heersian marls of Gelinden; lowermost Landenian, Paleocene, Belgium  
(Schumacker-Lambry, J., et al.) 21(4): 267-294

— Microspore and megaspore assemblages in an upper Westphalian A stratum, Beeringen seam 70, in Campine, Belgium  
(Piéart, P.) 7(4): 275-283

*Pteridophytes*: New observations on the vegetative axes of *Drepanophycus spinaeformis* from the lower Emsian of the "New Quarries" of Dave, Belgium  
(Fairon-Demaret, M.) 26(1-4): 9-20

— The Emsian plants of Sart Tilman (Belgium); II, *Sartilmnia jabachensis*, comb. nov.  
(Fairon-Demaret, M.) 47(3-4): 225-239

— The plant fossils of the Emsian of Sart Tilman, Belgium; I, *Stockmansia langii* (Stockman's) comb. nov.

(Fairon-Demaret, M.) 44(3-4): 243-260

**Belgium—Stratigraphy**

*Cambrian*: Zone species of acritarchs from the Cambro-Tremadocian of Belgium and the French Ardennes  
(Vanguestaine, M.) 18(1-2): 63-82

*Devonian*: Dispersed spores associated with *Leclercqia complexa* Banks, Bonamo and Grierson from the late Middle Devonian of eastern New York State (U.S.A.)  
(Strel, M.) 14(1-2): 205-215

— Spore stratigraphy and correlation with faunas and floras in the type marine Devonian of the Ardennes-Rhenish regions  
(Strel, M., et al.) 50(3): 211-229

*Holocene*: Diatom analysis of an Atlantic-Subboreal core from Slije (western Belgian coastal plain)  
(Denys, L.) 46(1-2): 33-53

— The palaeoecology of the Holocene sediments at Kallo, northern Belgium  
(Janssens, W., et al.) 46(1-2): 81-95

*Ordovician*: Zone species of acritarchs from the Cambro-Tremadocian of Belgium and the French Ardennes  
(Vanguestaine, M.) 18(1-2): 63-82

*Paleocene*: Charophytes from the Montian of Mons, Belgium  
(Grambast-Fessard, N.) 30(1-2): 67-88

*Quaternary*: On the subboreal climate of the Belgian Campine as deduced from diatom and testate amoebae analyses  
(Beyens, L.) 46(1-2): 9-31

*Silurian*: The Silurian of the Mehaigne Valley (Brabant Massif, Belgium); biostratigraphy (Chitinozoa)  
(Verniers, J.) 34(2): 165-175

**Bibliography** *see also under* Paleobotany under Central America; Mexico; Romania; South America; Triassic; West Indies

**Bibliography—General**

*Andrews*: Henry N. Andrews, Jr.; a biographical sketch  
(Anonymous) 20(1-2): 3-11

*Grambast*: Louis Grambast (1927-1976)  
(Boureau, E.) 28(2): 95-102

*Jonker*: A short life history of Prof. Dr. F. P. Jonker  
(Janssen, C. R.) 26(1-4): 1-7

*Leclercq*: The scientific work of Suzanne Leclercq  
(Banks, H. P.) 14(1-2): 1-5

*Naumova*: In memoriam; Sofiya Nickolaevna Naumova (1902-1974)  
(Anonymous) 21(2): 135-139

*Vanhoorne*: Rogier Vanhoorne; an appreciation  
(Ferguson, D. K.) 46(1-2): 1-7

*Zaklinskaya*: Prof. Dr. E. D. Zaklinskaya's 70th birthday  
(Pacltova, B., et al.) 30(1-2): 1-9

**Bibliography—Paleobotany**

*Gymnosperms*: Patterns in gymnosperm evolution  
(Taylor, T. N.) 21(1): 1-134

*Palynology*: Bibliography of actuopalynology 1671-1966  
(Hulshof, O. K., et al.) 12(1-3): 1-243

— Bibliography of palaeopalynology 1836-1966  
(Manten, A. A.) 8(1-4)

*Plantae*: Index of figured plant megafossils; Triassic 1976-1980  
(Boersma, M., et al.) 49(3-4): 235-344

**Bibliography—Paleontology**

*Fossilization: Modes of fossil preservation*  
(Schopf, J. M.) 20(1-2): 27-53

**Bibliography—Stratigraphy**

*Biostratigraphy: The stratigraphic distribution of organic-walled dinoflagellate cysts in the Cretaceous and Tertiary*  
(Harker, S. D., et al.) 20(4): 217-315

*Paleozoic: Range chart of selected lower Paleozoic acritarch taxa*  
(Diez, M. d. C. R., et al.) 18(1-2): 155-170

**Biogeography** see also under Paleobotany under Continental drift; see also under Stratigraphy under Cretaceous; Paleozoic; Symposia

**Biogeography—Angiosperms**

*Holocene: Modeling Holocene changes in the location and abundance of beech populations in eastern North America*  
(Dexter, F., et al.) 50(3): 273-292

*Tertiary: Fruits and seeds of the Brandon Lignite; I, Vitaceae*

(Tiffney, B. H., et al.) 22(3): 169-191

— Systematics, biostratigraphy and paleoecology of the genus *Toddalia* Jussieu (Rutaceae) in the European Tertiary  
(Gregor, H. J.) 28(3-4): 311-363

**Biogeography—Bryophytes**

*Quaternary: Late Pleistocene and early Holocene bryophytes from Battle Ground Lake, Washington, U.S.A.*  
(Janssens, J. A., et al.) 46(1-2): 97-116

**Biogeography—Palynomorphs**

*Carboniferous: Aspects of Late Devonian and Early Carboniferous palynology of southern Ireland; I, The Cyrtospora cristifer morphon*  
(van der Zwan, C. J.) 28(1): 1-20

*Cretaceous: Distribution of several morphologic pollen types of the Cretaceous angiosperms*  
(Chlonova, A. F.) 48(4): 365-372

— Evolution of Upper Cretaceous phytogeoprovinces and their pollen flora  
(Srivastava, S. K.) 35(2-4): 155-173

— Introduction of multifactor analysis to the processing of Santonian (Upper Cretaceous) palynofloral data  
(Médus, J., et al.) 24(3): 141-154

— Mid-Cretaceous plant microfossils from the northern part of the Western Desert of Egypt  
(Sultan, I. Z.) 25(3-4): 259-267

— North Gondwanan floral elements in Lower to Middle Cretaceous sediments of the Southern Alps (southern Switzerland, northern Italy)  
(Hochuli, P. A.) 35(2-4): 337-358

— Note on the European-Turanian part of the Normapolles province  
(Batten, D. J.) 36(3-4): 379-380

— Senonian (Late Cretaceous) palynofloral provinces in circumpolar areas of the Northern Hemisphere  
(Chlonova, A. F.) 35(2-4): 315-324

— Tentative botanico-geographical subdivision of northern Asia in Late Cretaceous time  
(Samoylovich, S. R.) 2(1-4): 127-139

— The distribution of Normapolles in northwestern China  
(Zhao Yingniang, et al.) 35(2-4): 325-336

— The evolution and distribution of Normapolles pollen during the Cenophytic  
(Paclova, B.) 35(2-4): 175-208

*Devonian: Acritarchs, miospores and correlation of the Ludlovian-Downtonian and Silurian-Devonian boundaries*  
(Richardson, J. B., et al.) 34(2): 209-224

*Holocene: Numerical analysis of pollen samples from central Canada; a comparison of methods*  
(Birks, H. J. B., et al.) 20(3): 133-169

— Palynological evidence for the historic expansion of juniper and desert shrubs in Arizona, U.S.A.  
(Davis, O. K., et al.) 49(3-4): 177-193

— Pollen morphology of the Dichapetalaceae with special reference to evolutionary trends and mutual relationships of pollen types  
(Punt, W.) 19(1): 1-97

*Ordovician: Geographical differentiation of Ordovician acritarch assemblages in Europe*  
(Vavrdova, M.) 18(1-2): 171-175

*Paleogene: Normapolles pollen in Cretaceous/Palaeogene boundary deposits of the Priazov'ye (Azov Sea area)*  
(Mikhelis, A. A.) 35(2-4): 209-229

*Paleozoic: Late Devonian and Early Carboniferous acritarchs from Nyalam County, Xizang (Tibet), China*  
(Gao Lianda) 47(1-2): 17-30

*Silurian: Silurian acritarchs; distribution and trends*  
(Cramer, F. H., et al.) 18(1-2): 137-154

*Tertiary: Geographic distribution and dispersal of Normapolles genera in North America*  
(Tschudy, R. H.) 35(2-4): 283-314

— Special issue; The Normapolles group and province  
(Batten, D. J., et al.) 35(2-4): 125-285

— Stratigraphic, palaeogeographic and evolutionary significance of Late Cretaceous and early Tertiary Normapolles pollen  
(Batten, D. J.) 35(2-4): 125-137

*Triassic: Triassic palynology of the Carnarvon Basin, Western Australia*  
(Dolby, J. H., et al.) 22(2): 105-168

**Biogeography—Plantae**

*Cenozoic: Palynological information from late Pliocene-Pleistocene deposits recovered by deep-sea drilling in the region of the island of Timor*  
(Zaklinskaya, E. D.) 26(1-4): 227-241

*Holocene: Literature on vegetational history in Latin America; Supplement I*  
(Graham, A.) 27(1): 29-52

*Mesozoic: Palaeobotany of the Mesophyticum; state of the art*  
(Krassilov, V. A.) 50(3): 231-254

*Paleozoic: A re-evaluation of global plantgeographic provinces of the late Paleozoic*  
(Kremp, G. O. W.) 17(1-2): 113-132

*Quaternary: Vegetation of the Aude Basin between the Pyrenees and the Central Massif during late glacial and postglacial time based on charcoal analysis*  
(Vernet, J. L.) 30(1-2): 33-55

*Tertiary: The Tertiary flora of Southeast Asia with remarks on its palaeoenvironment and phytogeography of the Indo-Malayan region*  
(Bande, M. B., et al.) 49(3-4): 203-233

**Biogeography—Pteridophytes**

*Carboniferous: Euramerican coal-swamp plants in mid-Carboniferous of Morocco*  
(Galtier, J., et al.) 49(1-2): 93-98

— Nothorhacopteris, a new generic name for some Carboniferous monopinnate fronds of Gondwanaland (= Rhacopteris ovata auct. and Pseudorhacopteris Rigby 1973)  
(Archangelsky, S.) 38(3-4): 157-172

*Triassic*: Pleuromeia from the Lower Triassic of the Far East of the U.S.S.R.  
(Krassilov, V. A., et al.) 19(3): 221-232

**Biography** *see also Bibliography*

**Biography—General**

*Andrews*: Henry N. Andrews, Jr.; a biographical sketch  
(Anonymous) 20(1-2): 3-11

*Banks*: Dedication  
(Allen, K. C.) 29(3-4): 163-164

*Barghoorn*: Dedication of symposium; Paleobotanical perspectives on plant evolution, Paleobotanical Section, Botanical Society of America, to Elso Sterrenberg Barghoorn, Jr. (1915-1984)  
(Schultes, R. E., et al.) 50(1-2): 5-12

*Cookson*: In Memoriam, Isabel Clifton Cookson (1893-1973)  
(Baker, G.) 16(3): 133-135

*Eisenack*: Alfred Eisenack (1891-1982) and his contribution to palynology  
(Sarjeant, W. A. S.) 45(1-2): 3-15

*Erdtman*: In Memoriam, O. G. E. (Gunnar) Erdtman (1897-1973)  
(Nilsson, S., et al.) 15(1): 1-2

*Grambast*: Louis Grambast (1927-1976)  
(Boureau, E.) 28(2): 95-102

— Preface [to Louis Grambast special issue]  
(Banks, H. P., et al.) 28(2): 93-94

*Jonker*: A short life history of Prof. Dr. F. P. Jonker  
(Janssen, C. R.) 26(1-4): 1-7

*Leclercq*: The scientific work of Suzanne Leclercq  
(Banks, H. P.) 14(1-2): 1-5

*Muller*: In memoriam; Dr. Jan Muller  
(Punt, W.) 40(4): 233-235

*Naumova*: In memoriam; Sofiya Nickolaevna Naumova (1902-1974)  
(Anonymous) 21(2): 135-139

*Neishtadt*: In memoriam Professor Mark Ilich Neishtadt (1903-1985)  
(Zaklinskaya, E. D.) 47(3-4): 203

*Overbeck*: Prof. Dr. Fritz Theodor Overbeck  
(Straka, H.) 40(1-2): 1-3

*Pokrovskaya*: In memoriam; I. M. Pokrovskaya (1902-1970)  
(Boitsova, E. P., et al.) 11(2): 163-164

*Potonie*: In memoriam; Robert Potonie (1889-1974)  
(Grebe, H.) 17(3-4): 219-220

*Vanhoorne*: Rogier Vanhoorne; an appreciation  
(Ferguson, D. K.) 46(1-2): 1-7

*Zaklinskaya*: Prof. Dr. E. D. Zaklinskaya's 70th birthday  
(Pacltova, B., et al.) 30(1-2): 1-9

**Biologic evolution** *see under* Algae; Angiosperms; Gymnosperms; Palynomorphs; Plantae; Pteridophytes

**Book reviews—Economic geology**

*Title*: Petroleum microbiology [book review]  
(Staplin, F. L.) 6(1): 85-86

**Book reviews—General**

*Title*: Geological factor analysis [book review]  
(David, M.) 24(4): 217-218

**Book reviews—Oceanography**

*Title*: Microbiology of oceans and estuaries [book review]  
(Sieburth, J. M.) 7(1): 69-71

**Book reviews—Paleobotany**

*Title*: A palynological study on the upper Los Cuervos and Mirador formations (lower and middle Eocene; Tibu area, Colombia) [book review]  
(Manten, A. A.) 6(3-4): 349

— Adelbert von Chamisso; And let's evaluate what I have observed; book review  
(van der Burgh, J.) 45(3-4): 377

— An atlas of past and present pollen maps of Europe; 0—13,000 years ago [book review]  
(Munaut, A. V.) 47(3-4): 411-412

— An atlas of Recent European moss spores [book review]  
(Crum, H.) 23(5): 404-406

— An illustrated guide to pollen analysis [book review]  
(Skvarla, J. J.) 32(4): 449-450

— An investigation of microplankton assemblages from the Albian of the Paris Basin [book review]  
(Chronic, J.) 16(4): 289-290

— Atlas of airborne fungal spores in Europe [book review]  
(Gams, W., et al.) 44(1-2): 151-152

— Atlas of middle and upper Tertiary disperse spores and pollen as well as microplankton forms of northern Central Europe; 4-5, Further azonotrilete, (apiculate, murornate) zonotrilete, monolete and alete spore forms; book review  
(Manten, A. A.) 6(3-4): 349-350

— Bibliography and index to palaeobotany and palynology 1950-1970 [book review]  
(Laufeld, S.) 19(3): 237-239

— Biological Reviews, 45(3); Major evolutionary events and the geological record of plants [book review]  
(Andrews, H. N.) 11(3-4): 311-312

— Calcareous algae [book review]  
(Riding, R.) 27(1): 93-94

— Calcareous nannoplankton from the Miocene of Rotti, Indonesia [book review]  
(Downie, C.) 23(5): 402-403

— Central European woods; a microphotographic atlas; book review  
(van der Burgh, J.) 32(4): 450

— Contributions to the Paleo-ethnobotany of Europe; book review  
(Sauer, J. D.) 32(4): 447-449

— Dicotyledon pollen from the European USSR; Lamiaceae-Zygophyllaceae; book review  
(Praglowksi, J.) 29(1-2): 154-155

— Elsevier's dictionary of botany; 1, Plant names [book review]  
(Major, J.) 32(4): 451

— Evolution and dispersal of the flowering plants; book review  
(Pacltova, B.) 23(4): 331-332

— Evolution-natural history of higher plants; book review  
(Zoller, H.) 34(3-4): 409-410

— Fertilization in higher plants [book review]  
(Raghavan, V.) 23(4): 333-335

— Floristics and paleofloristics of Asia and eastern North America [book review]  
(Punt, W.) 15(4): 316

- Fossil algae of the U.S.S.R. [book review]  
(Elliott, G. F.) 11(3-4): 313-314
- Geobotany [book review]  
(Birks, H. J. B.) 27(1): 99-100
- History of botany; book review  
(Zoller, H.) 16(3): 209-210
- Gymnosperm and fagacean pollen from the Rio Turbio Formation, Eocene, Santa Cruz, Argentina; book review  
(Punt, W.) 29(1-2): 156
- Handbook of palynology; morphology-taxonomy-ecology; an introduction to the study of pollen grains and spores [book review]  
(Muir, M. D.) 10(1): 83-84
- Bibliographic index of angiosperm pollen morphology; book review  
(Punt, W.) 14(3-4): 362
- Index of figured plant megafossils; Carboniferous 1971-1975 [book review]  
(Scott, A. C.) 29(1-2): 151-153
- Index of figured plant megafossils; Permian, 1971-1975 [book review]  
(Taylor, T. N.) 34(3-4): 412
- J. Sen memorial volume [book review]  
(Pettitt, J.) 10(4): 335-336
- Katalog der Dinoflagellaten, Hystrichosphären und verwandten Mikrofossilien; 1, Dinoflagellaten, 2. Ergänzungslieferung—Catalogue of fossil dinoflagellates, hystrichospheres and related microfossils; 1, Dinoflagellates, 2nd Supplement [book review]  
(Baltes, N.) 15(4): 315-316
- Late Palaeozoic plants from Yuerhung, Kansu, China [book review]  
(Chaloner, W. G.) 15(4): 317-318
- Maple leafs from the Tertiary of North Bohemia [book review]  
(Kramer, K., et al.) 27(1): 94-95
- Mesozoic and Cainozoic palynology; essays in honor of Isabel Cookson [book review]  
(Traverse, A.) 19(3): 239-240
- Miocene flora of Kreuzau, West Germany; 1, The leaf-remains [book review]  
(Zaklinskaya, E. D.) 14(3-4): 359-361
- Palaeopalynology; Vol. 2, Assemblages of spores, pollen, and other plant microfossils characteristic of various stratigraphical subdivisions from the upper Precambrian to the Holocene in the U.S.S.R. *Trudy VSEGEI*, 141 (2) [book review]  
(Baltes, N.) 13(2): 155-156
- Paleobiology of plants; book review  
(Chaloner, W. G.) 9(1-2): 119-120
- Paleobotany; an introduction to fossil plant biology [book review]  
(Sam, S. J.) 41(3-4): 353-354
- Paleobotany and the evolution of plants [book review]  
(Taylor, T. N.) 44(1-2): 151
- Paleozoic and Mesozoic flora from Eurasia, and their Recent phytogeography; book review  
(Pacltova, B.) 29(1-2): 155
- Past and present vegetation of the Isle of Skye; a palaeoecological study [book review]  
(Chaloner, W. G.) 19(2): 159-160
- Plant life in the Devonian [book review]  
(Taylor, T. N.) 45(3-4): 377-378
- Pollen analytical studies in East and Southern Africa [book review]  
(Manten, A. A.) 7(1): 71
- Pollen and spores of Chile; modern types of the Pteridophyta, Gymnospermae and Angiospermae [book review]  
(Archangelsky, S.) 13(1): 81-82
- Pollen and spores of tropical Africa; book review  
(Muller, A.) 23(4): 332-333
- Pollen flora of Argentina; modern spore and pollen types of Pteridophyta, Gymnospermae and Angiospermae [book review]  
(Gamerro, J. C.) 29(1-2): 157-158
- Principles of dispersal in higher plants [book review]  
(Mahabale, T. S.) 11(2): 159-161
- Proceedings of the seminar on palaeopalynology and Indian stratigraphy, Calcutta, 1971 [book review]  
(Balme, B. E.) 19(3): 235-236
- Revision of the Indian species of *Glossopteris* [book review]  
(Rigby, J. F.) 32(4): 455-456
- Textbook of pollen analysis [book review]  
(Muller, J.) 23(5): 399-402
- The archaeology of Svendborg, Denmark; 1, Diatom analyses [book review]  
(Round, F. E.) 29(1-2): 150-151
- The evolution of plants and flowers [book review]  
(Rothwell, G. W.) 41(3-4): 353
- The evolutionary significance of the exine [book review]  
(Pettitt, J. M.) 23(5): 403-404
- The flora and vegetation of Japan [book review]  
(Graham, A.) 19(3): 236-237
- The fossil flora in the Namurian of the Ruhr coal basin; book review  
(Pacltova, B.) 47(3-4): 412
- The fossil hunters; in search of ancient plants [book review]  
(Beck, C. B.) 34(3-4): 410-411
- The Genera File, a major achievement in palynology; a review  
(Visscher, H.) 30(1-2): 159-164
- The Northwest European pollen flora, III [book review]  
(Muller, J.) 37(3-4): 400-401
- The whole fungus [book review]  
(Smiley, C. J.) 32(4): 453-454
- The Yorkshire Jurassic flora; V, Coniferales [book review]  
(van Konijnenburg-van Cittert, J. H. A.) 29(1-2): 156-157
- Vegetation and vegetational history of northern Latin America [book review]  
(Archangelsky, S.) 18(3-4): 309-310
- World pollen flora [book review]  
(Punt, W.) 10(4): 333-335
- Xylotomy of the living conifers [book review]  
(Schweitzer, H. J., et al.) 16(4): 291-292

**Book reviews—Paleontology**

*Title: Atlas of palaeobiogeography* [book review]  
(Donovan, D. T.) 15(4): 318-320

— Biogeography; fauna and flora of the Earth and their historical development; book review  
(Brinkmann, R.) 29(1-2): 153-154

- Manual of planktonic foraminifera [book review]  
(Downie, C.) 13(3-4): 255-256
- Mazon Creek fossils [book review]  
(Beck, C. B.) 32(4): 454-455
- Molecular evolution; 1, Chemical evolution and the origin of life [book review]  
(Margulis, L.) 13(3-4): 256-258
- Origin and development of living systems [book review]  
(Bryson, V.) 16(4): 290-291
- The elements of palaeontology [book review]  
(Baltes, N.) 11(3-4): 312-313
- The meaning of fossils; episodes in the history of paleontology [book review]  
(Gould, S. J.) 16(3): 210-212

#### Book reviews—Stratigraphy

- Title*: Biostratigraphy of fossil plants; successional and paleoecological analyses [book review]  
(Scott, A. C.) 37(3-4): 395-397
- Essays from the Central Geological Institute; 8, Explanation of spore stratigraphy tables from the Zechstein through the Oligocene; book review  
(Manten, A. A.) 7(1): 72
- Introduction to quantitative paleoecology [book review]  
(Speight, M. C. D.) 13(3-4): 253-255
- Palaeoecology of Africa and of the surrounding islands and Antarctica; 9 [book review]  
(Roche, E.) 27(1): 95-97
- Peat stratigraphy and climatic change; a palaeoecological test of the theory of cyclic bog regeneration [book review]  
(Wijmstra, T. A.) 37(3-4): 399
- Quaternary palaeoecology [book review]  
(Donner, J. J.) 34(3-4): 407-408
- Stratigraphic micropaleontology of Atlantic Basin and borderlands [book review]  
(Loeffler, H.) 27(1): 97-99
- The biostratigraphy of the Permian and Triassic; Part 3, A review of Gondwana Permian palynology, with particular reference to the northern Karoo Basin, South Africa [book review]  
(Hughes, N. F.) 29(1-2): 149-150
- The dinoflagellates of the Albian and lower Cenomanian of the Paris Basin; book review  
(Sarjeant, W. A. S.) 32(4): 451-453
- The early history of marsh settlement at Elisenhof, Eiderstedt; book review  
(Bottema, S.) 24(4): 219-220
- The glaciation of the Ecuadorian Andes [book review]  
(Wijmstra, T. A.) 37(3-4): 398
- Upper Carboniferous fossil flora of Nova Scotia [book review]  
(Scott, A. C.) 34(3-4): 408-409

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(Regali, M. d. S. P.) 34(2): 237-246

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(Chaloner, W. G., et al.) 28(2): 117-136

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- Tertiary*: Tertiary scolecodont assemblages of the Maranhao continental shelf, Northeast Brazil  
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(Krassilov, V. A.) 50(3): 231-254
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(Dickson, J. H.) 2(1-4): 245-253

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(Hochuli, P. A., et al.) 44(3-4): 261-275

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- Quaternary*: Late Pleistocene and early Holocene bryophytes from Battle Ground Lake, Washington, U.S.A.  
(Janssens, J. A., et al.) 46(1-2): 97-116

#### Bulgaria—Paleobotany

- Palynomorphs*: Biometrics of *Veryhachium minutum* Downie, 1958 (Acritarcha) from the Ordovician in the Iskur Gorge, Bulgaria  
(Kalvacheva, R., et al.) 18(1-2): 177-186

#### California—Stratigraphy

- Quaternary*: Late Quaternary vegetation in the Mohave Desert (U.S.A.)  
(Mehringer, P. J., Jr) 2(1-4): 319-320

- Cambrian** *see also under Stratigraphy under Belgium; Czechoslovakia; France; Great Britain; India; Italy; Northern Hemisphere*

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- Cretaceous*: Maestrichtian and Tertiary palynology of Cameroon; botanical results  
(Salard-Cheboldaeff, M.) 32(4): 401-439

- Maestrichtian and Tertiary palynology of Cameroon; qualitative study and range of the principal species  
(Salard-Cheboldaeff, M.) 28(3-4): 365-388

- Tertiary*: Maestrichtian and Tertiary palynology of Cameroon; botanical results  
(Salard-Cheboldaeff, M.) 32(4): 401-439

- Maestrichtian and Tertiary palynology of Cameroon; qualitative study and range of the principal species  
(Salard-Cheboldaeff, M.) 28(3-4): 365-388

- Canada** *see also Alberta; Appalachians; Great Plains; Manitoba; New Brunswick; Newfoundland; Northwest Territories; Nova Scotia; Ontario; Quebec; Rocky Mountains; Saskatchewan*

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- Palynomorphs*: Morphological and ultrastructural features of *Nikitinsporites canadensis* Chaloner, a Devonian megaspore from the Frasnian of Canada  
(Taylor, T. N., et al.) 30(1-2): 89-99

- Numerical analysis of pollen samples from central Canada; a comparison of methods  
(Birks, H. J. B., et al.) 20(3): 133-169

- Pollen dispersal phenomena in Arctic-Subarctic Canada  
(Ritchie, J. C., et al.) 3(1-4): 255-266

- Recent pollen assemblages from the Western Interior of Canada  
(Lichti-Federovich, S., et al.) 7(4): 297-344

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*Mesozoic*: The Jurassic-Cretaceous boundary in northern Canada  
(Pocock, S. A. J.) 5(1-4): 129-136

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(Bein, A., et al.) 47(1-2): 89-95

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*Palynomorphs*: Suggestions for a morphological classification of sporae dispersae  
(Bharadwaj, D. C., et al.) 6(1): 41-59

*Pteridophytes*: "Compression species" and "petrification species" of *Sphenophyllum* compared  
(Batenburg, L. H.) 36(3-4): 335-359

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*Palynomorphs*: *Hymenozonotrites lepidophytus* Kedo, its distribution and significance in relation to the Devonian-Carboniferous boundary  
(Owens, B., et al.) 1(1-4): 141-150

**Caribbean region** *see also* the individual countries**Caribbean region—Paleobotany**

*Plantae*: Literature on vegetational history in Latin America; Supplement I  
(Graham, A.) 27(1): 29-52

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*Cretaceous*: Normapolles pollen in Upper Cretaceous and Paleogene deposits of the Skale Zone of the Carpathians  
(Portnyagina, L. A.) 35(2-4): 231-235

— Stratigraphy and palynology of the upper Cretaceous-Paleogene flysch of the Skale zone of the Carpathians  
(Portnyagina, L. A.) 11(1): 55-64

**Catalogs—Paleobotany**

*Palynomorphs*: The catalog of fossil spores and pollen; history and status  
(Traverse, A., et al.) 10(3): 165-173

**Cenozoic** *see also* Holocene; Neogene; Pleistocene; Quaternary; Tertiary; *see also under* Stratigraphy *under* Israel; USSR**Cenozoic—Paleobotany**

*Palynomorphs*: Some remarks about the genus *Magnastriatites* Germeraad, Hopping et Muller, 1968  
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(Martin, A. R. H.) 21(2): 141-169

*Plantae*: Rogier Vanhoorne; an appreciation  
(Ferguson, D. K.) 46(1-2): 1-188

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*Bibliography*: Literature on vegetational history in Latin America; Supplement II  
(Graham, A.) 37(3-4): 185-223

— Literature on vegetational history in Latin America; Supplement III  
(Graham, A.) 48(1-3): 199-239

*Plantae*: Literature on vegetational history in Latin America; Supplement I  
(Graham, A.) 27(1): 29-52

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(Wang Ziquiang) 39(1-2): 87-107

— Quaternary record of *Azolla pinnata* from China and its sporoderm ultrastructure  
(Zhou Zhiyan) 39(1-2): 109-129

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*Carboniferous*: Late Devonian and Early Carboniferous acritarchs from Nyalam County, Xizang (Tibet), China  
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— The Early Cretaceous megaspore Arcellites and closely associated Crybelosporites microspores from Northeast Inner Mongolia, P.R. China  
(Li Wen-Ben, et al.) 46(3-4): 189-208

*Devonian*: Devonian spore assemblages of China  
(Gao Lianda) 34(1): 11-23

— Late Devonian and Early Carboniferous acritarchs from Nyalam County, Xizang (Tibet), China  
(Gao Lianda) 47(1-2): 17-30

*Paleogene*: The distribution of Normapolles in northwestern China  
(Zhao Yingniang, et al.) 35(2-4): 325-336

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(Pons, D.) 11(2): 101-123

*Palynomorphs*: Palynological record of the upheaval of the northern Andes; a study of the Pliocene and lower Quaternary of the Colombian Eastern Cordillera and the early evolution of its high-Andean biota  
(van der Hammen, T., et al.) 16(1-2): 1-122

— Pollen rain in relation to arboreal vegetation in the Colombian Cordillera Oriental  
(Grabandt, R. A. J.) 29(1-2): 65-147

— Pollenmorphology of *Lysipomia* H.B.K. and *Rhizocephalum* Wedd. (Campanulaceae) and the revision of the pollen determination "Valeriana stenophylla" Killip  
(van der Hammen, T.) 25(5): 367-376

— Pollenmorphology of *Polylepis boyacensis* Cuatrecasas, *Acaena cylindristachya* Ruiz et Pavon and *Acaena elongata* L. (Rosaceae) and its application to fossil material  
(Smit, A.) 25(5): 393-398

— Spores of Recent Colombian Pteridophyta; I, Trilete spores  
(Murillo, M. T., et al.) 18(3-4): 223-269

— Spores of Recent Colombian Pteridophyta; II, Monolete spores  
(Murillo, M. T., et al.) 25(5): 319-365

— Zygnemataceae in Quaternary Colombian sediments  
(van Geel, B., et al.) 25(5): 377-392

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*Miocene*: Palynology of Oligocene-Miocene strata of borehole Q-E-22, Planeta Rica, northern Colombia  
(Dueñas J., H.) 30(3-4): 313-328

*Oligocene*: Palynology of Oligocene-Miocene strata of borehole Q-E-22, Planeta Rica, northern Colombia  
(Dueñas J., H.) 30(3-4): 313-328

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**Columbia—Paleobotany**

*Palynomorphs*: Palynology of Tertiary sediments from tropical areas  
(Germeraad, J. H., et al.) 6(3-4): 189-348

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(Davis, M. B.) 2(1-4): 219-230

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*Quaternary*: Pollen accumulation rates at Rogers Lake, Connecticut, during Late- and Postglacial time  
(Davis, M. B.) 2(1-4): 219-230

**Conodonts—Biostratigraphy**

*Carboniferous*: Aspects of Late Devonian and Early Carboniferous palynology of southern Ireland; V, The change in composition of palynological assemblages at the Devonian-Carboniferous boundary  
(van Veen, P. M.) 34(1): 67-97

*Devonian*: Miospores in Givetian to lower Frasnian sediments dated by conodonts from the Boulonnais, France  
(Loboziak, S., et al.) 29(3-4): 285-299

— Miospores in middle-upper Frasnian to Famennian sediments partly dated by conodonts (Boulonnais, France)  
(Loboziak, S., et al.) 34(1): 49-66

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(Archangelsky, S.) 38(3-4): 157-172

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(Kremp, G. O. W.) 17(1-2): 113-132

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**Cretaceous** *see also under* Stratigraphy under Arctic Ocean; Arctic region; Cameroon; Carpathians; China; Egypt; England; Europe; France; India; Italy; Montana; Netherlands; Nigeria; North America; Northern Hemisphere; Oklahoma; Poland; Portugal; Pyrenees; Spain; Switzerland; USSR

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(Miller, C. N., Jr.) 21(1): 101-117

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*Biogeography*: Distribution of several morphologic pollen types of the Cretaceous angiosperms  
(Chlonova, A. F.) 48(4): 365-372

*Biostratigraphy*: Evolution of Upper Cretaceous phytogeoprovinces and their pollen flora  
(Srivastava, S. K.) 35(2-4): 155-173

— The stratigraphic distribution of organic-walled dinoflagellate cysts in the Cretaceous and Tertiary  
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(Kalibova-Kaiserova, M.) 1(1-4): 201-210

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(Paris, F., et al.) 43(1-3): 155-177

— Observations on Middle Devonian microfossils from the Barrandian Basin, Czechoslovakia  
(Lele, K. M.) 14(1-2): 129-134

— Some new pollen grains from the Bohemian Cenomanian  
(Pacltova, B.) 7(2): 99-106

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(Konzalova, M.) 18(1-2): 41-56

*Carboniferous*: The synchronous floras in the Upper Carboniferous of Europe and the mesophilous flora of the Ostrava-Karvina Coal District  
(Havlena, V.) 12(4): 245-270

*Ordovician*: Arenigian chitinozoans from the Klabava Formation, Bohemia  
(Paris, F., et al.) 43(1-3): 33-65

*Precambrian*: Acritarchs from the Bohemian Precambrian (upper Proterozoic) and lower-Middle Cambrian  
(Konzalova, M.) 18(1-2): 41-56

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*Palynology*: A computer-based numerical coding system for the description of pollen grains and spores  
(Germraad, J. H., et al.) 10(3): 175-202

— Laser plotting of pollen diagrams  
(Veldkamp, A. C., et al.) 32(4): 441-443

— Multidimensional scaling as a research tool in Quaternary palynology; a review of theory and methods  
(Prentice, I. C.) 31(1-2): 71-104

*Palynomorphs*: Numerical analysis of pollen samples from central Canada; a comparison of methods  
(Birks, H. J. B., et al.) 20(3): 133-169

— Numerical analysis study of pollen grain populations of *Eryngium maritimum* L. (Umbelliferae) (van der Pluym, A., et al.) 24(3): 119-139

**Delaware—Paleobotany**  
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**Denmark—Paleobotany**  
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 — Tree-pollen rain in a mixed deciduous forest in South Jutland (Denmark) (Andersen, S. T.) 3(1-4): 267-275

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*Pleistocene*: Late-Glacial pollen diagrams from Hjelm and Draved-Mose (Denmark) with a suggestion of the possibility of drought during the earlier Dryas (Kolstrup, E.) 36(1-2): 35-63  
 — Palynological correlation of the flora and vegetation of the Likhvin-Mazovian I-Holstein-Neede Interglacial (Ananova, E. N.) 4(1-4): 175-186

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 — Temperature and rainfall variation in the Holocene based on comparative palaeoecology and isotope geology of a hummock and a hollow (Bourtangerveen, The Netherlands) (Dupont, L. M.) 48(1-3): 71-159  
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*Plantae*: Chemotaxonomy of *Prototaxites* and evidence for possible terrestrial adaptation (Niklas, K. J.) 22(1): 1-17  
*Thallophytes*: Chemotaxonomy of some problematic Palaeozoic plants (Niklas, K. J., et al.) 22(2): 81-104

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*Palynomorphs*: *Hymenozonotrites lepidophytus* Kedo, its distribution and significance in relation to the Devonian-Carboniferous boundary (Owens, B., et al.) 1(1-4): 141-150

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 — Pollen deposition in a small closed drainage basin lake (Dodson, J. R.) 24(4): 179-193

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*Palynology*: Guest editorial; Scanning electron microscopy in palynology  
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- Schizaeaceous spores in situ from the Jurassic of Yorkshire, England  
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— Aspects of Middle and Late Triassic palynology; VI, Palynological investigations in the Ladinian and lower Karnian of the western Dolomites, Italy  
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*Bibliography*: Literature on vegetational history in Latin America; Supplement III  
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— A probable erroneous identification of *Tricolporopollenites distinctus* Groot et Penny from lowermost Cretaceous strata in the eastern Netherlands  
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— A palaeoecological study of Holocene peat bog sections in Germany and the Netherlands, based on the analysis of pollen, spores and macro- and microscopic remains of fungi, algae, cormophytes and animals (van Geel, B.) 25(1): 1-120

— Palaeobotanic and isotopic analysis of late Subboreal and early Subatlantic peat from Engbertsdijksveen VII, The Netherlands (Dupont, L. M., et al.) 41(3-4): 241-271

— Paleoecological studies in the Klokkeveel Bog near Hoogkarspel (prov. of Noord-Holland) (Pals, J. P., et al.) 30(3-4): 371-418

— Temperature and rainfall variation in the Holocene based on comparative palaeoecology and isotope geology of a hummock and a hollow (Bourtangerveen, The Netherlands) (Dupont, L. M.) 48(1-3): 71-159

— Vegetational and environmental succession and net organic production between 4500 and 800 B.P. reconstructed from a peat deposit in the western Dutch coastal area (Assendelver Polder) (Witte, H. J. L., et al.) 45(3-4): 239-300

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(Batten, D. J.) 35(2-4): 125-137

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*Publications:* Editorial; A new medium in the struggle for understanding (Manten, A. A.) 1(1-4): 9-10

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(van Geel, B.) 25(1): 1-120

— Palaeobotanic and isotopic analysis of late Subboreal and early Subatlantic peat from Engbertsdijksveen VII, The Netherlands  
(Dupont, L. M., et al.) 41(3-4): 241-271

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- Cretaceous*: New observations on the structure and development of *Nathorstianella*  
(Karrfalt, E.) 47(1-2): 1-8
- Devonian*: Dispersed spores associated with *Leclercqia complexa* Banks, Bonamo and Grierson from the late Middle Devonian of eastern New York State (U.S.A.)  
(Strel, M.) 14(1-2): 205-215
- *Leclercqia complexa* gen. et sp. nov., a new lycopod from the late Middle Devonian of eastern New York  
(Banks, H. P., et al.) 14(1-2): 19-40
- New observations on the vegetative axes of *Drepanophycus spinaeformis* from the lower Emsian of the "New Quarries" of Dave, Belgium  
(Fairon-Demaret, M.) 26(1-4): 9-20
- On Lower Devonian plants from Libya  
(Lejal-Nicol, A., et al.) 29(3-4): 221-239
- The effect of pyrite on the tracheid structure of *Drepanophycus spinaeformis*, a long-ranging Devonian lycopod  
(Hartman, C. M.) 32(2-3): 239-255
- Holocene*: Structural adaptations shown by the Lepidocarpaceae  
(Thomas, B. A.) 32(4): 377-388
- Morphology*: Electron microscopy of the sporoderm of megaspores of the genus *Selaginella*, Pteridophyta  
(Kempf, E. K.) 10(2): 99-116
- Pennsylvanian*: Arborescent lycopod reproduction and paleo-ecology in a coal-swamp environment of late Middle Pennsylvanian age (Herrin Coal, Illinois, U.S.A.)  
(DiMichele, W. A., et al.) 44(1-2): 1-26
- Cormophyton gen. nov.; a cormose lycopod from the Middle Pennsylvanian Mazon Creek flora  
(Pigg, K. B., et al.) 44(3-4): 165-181
- Petrified Stigmaria of Sigillarian origin from North America  
(Eggert, D. A.) 14(1-2): 85-99
- Permian*: Azaniadendron, a new genus of lycopod from South Africa  
(Rayner, R. J.) 47(1-2): 129-143
- Brasilodendron gen. nov. and *B. pedroanum* (Carruthers) comb. nov., a Permian lycopod from Brazil  
(Chaloner, W. G., et al.) 28(2): 117-136
- Triassic*: Pleuromeia from the Lower Triassic of the Far East of the U.S.S.R.  
(Krassilov, V. A., et al.) 19(3): 221-232

#### Pteridophytes—Miscellanea

- Devonian*: *Estinnophyton wahnbachense* comb. nov., a remarkable plant from the Siegenian of Germany  
(Fairon-Demaret, M.) 28(2): 145-160

#### Pteridophytes—Morphology

- Imprints*: "Compression species" and "petrification species" of *Sphenophyllum* compared  
(Batenburg, L. H.) 36(3-4): 335-359
- Paleozoic*: Ultrastructural studies of Paleozoic seed fern pollen; sporoderm development  
(Taylor, T. N.) 37(1-2): 29-53
- Spores*: Tetrad markings of pteridophytic spores and their evolutionary significance  
(Kremp, G. O. W.) 3(1-4): 311-323

#### Pteridophytes—Noeggerathiales

- Pennsylvanian*: *Lacoea* with sporangia and *Calamospora* spores from Rock Island, Illinois  
(Leary, R. L.) 29(1-2): 23-28

#### Pteridophytes—Psilopsida

- Devonian*: A *Zosterophyllum* fructification from the Lower Old Red Sandstone of Scotland  
(Edwards, D.) 14(1-2): 77-83
- Evidence for the sporophytic status of the Lower Devonian plant *Rhynia gwynne-vaughanii* Kidston and Lang  
(Edwards, D. S.) 29(3-4): 177-188
- Heterosporous, barinophytacean plants from the Upper Devonian of North America and a discussion of the possible affinities of the Barinophytaceae  
(Brauer, D. F.) 33(2-4): 347-362
- Observations on *Nothia aphylla* Lyon ex Hoeg  
(El-Saadawy, W. E., et al.) 27(2): 119-147
- *Rebuchia ovata*, its vegetative morphology and classification with the *Zosterophyllophytina*  
(Hueber, F. M.) 14(1-2): 113-127
- *Renalia hueberi*, a new plant from the Lower Devonian of Gaspe  
(Gensel, P. G.) 22(1): 19-37
- Specimens identified as *Protolepidodendron scharianum* by Kräuse and Weyland, 1932  
(Fairon-Demaret, M.) 29(3-4): 201-220
- Studies on Lower Devonian petrifications from Britain; I, Pyritised axes of *Hostinella* from the Brecon Beacons Quarry, Powys, South Wales  
(Edwards, D.) 29(3-4): 189-200
- The Emsian plants of Sart Tilman (Belgium); II, *Sartilmania jabachensis*, comb. nov.  
(Fairon-Demaret, M.) 47(3-4): 225-239
- The plant fossils of the Emsian of Sart Tilman, Belgium; I, *Stockmansia langii* (Stockman's) comb. nov.  
(Fairon-Demaret, M.) 44(3-4): 243-260
- The role of *Psilophyton* in the evolution of vascular plants  
(Banks, H. P.) 29(3-4): 165-176
- Morphology*: The sporangia of *Horneophyton lignieri* (Kidston and Lang) Barghoorn and Darrah  
(El-Saadawy, W. E., et al.) 28(2): 137-144

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- Pennsylvanian*: A reinvestigation of Early Pennsylvanian species of *Mariopteris* from the Appalachian region; I, *Karinopteris*, *Mariopteris* and the "Pottsville Complex"  
(Gastaldo, R. A., et al.) 38(3-4): 185-226

— A reinvestigation of Early Pennsylvanian species of *Mariopteris* from the Appalachian region; II, *Eusphenopteris* and *Sphenopteris* (Gastaldo, R. A., et al.) 38(3-4): 227-247

*Permian*: Aspects of Permian palaeobotany and palynology; I, *Sobernheimia* *jonkeri* nov. gen., nov. sp., a new fossil plant of cycadalean affinity from the Waderner Gruppe of Sobernheim (Kerp, J. H. F.) 38(3-4): 173-183

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— *Sphenophyllum miravallis* Vetter and *Bowmanites cupulatus* sp.n. from the "Ilinger Flözzone" ("Heusweiler Schichten", lower Stephanian, Saar Basin, German Federal Republic) (Hetterscheid, W. L. A., et al.) 40(4): 263-293

— The *Sphenophyllum* species in the Carboniferous flora of Holz (Westphalian D, Saar Basin, Germany) (Batenburg, L. H.) 24(2): 69-99

— Vegetative anatomy and ecology of *Sphenophyllum zwickaviense*, *S. emarginatum*, and other "compression species" of *Sphenophyllum* (Batenburg, L. H.) 32(2-3): 275-313

*Jurassic*: *Equisetum filum* sp. nov. from the Middle Jurassic of Yorkshire (Harris, T. M.) 28(2): 161-168

*Morphology*: A comparative study of nodal anatomy in *Peltastrobis reedae* and *Sphenophyllum plurifoliatum* (Baxter, R. W.) 14(1-2): 41-47

*Pennsylvanian*: Intercalary growth in the fossil arthrophyte, *Sphenophyllum* (Schabillon, J. T.) 20(1-2): 103-108

— *Lacoea*, a Lower Pennsylvanian noeggerathian cone from Illinois (Leary, R. L.) 15(1): 43-50

*Permian*: Aspects of Permian palaeobotany and palynology; III, A new reconstruction of *Lilpopia raciborskii* (Lilpop) Conert et Schaarschmidt (Sphenopsida) (Kerp, J. H. F.) 40(4): 237-261

— Aspects of Permian palaeobotany and palynology; V, On the nature of *Asterophyllites dumasi* Zeiller, its correlation with *Calamites gigas* Brongniart and the problem concerning its sterile foliage (Kerp, J. H. F.) 41(3-4): 301-317

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*Carboniferous*: Suggestions for a morphological classification of sporae dispersae (Bharadwaj, D. C., et al.) 6(1): 41-59

*Classification*: A system of form-genera for the upper Palaeozoic lepidophyte stems represented by compression-impression material (Thomas, B. A., et al.) 41(3-4): 273-281

*Interpretation*: Studies on Lower Devonian petrifications from Britain; 2, *Sennicaulis*, a new form genus for sterile axes based on pyrite and limonite petrifications from the Senni Beds (Edwards, D.) 32(2-3): 207-226

*Nomenclature*: Organic relation of two fossil taxa as a taxonomic problem exemplified by the late Paleozoic fern fructifications *Scolecopteris* and *Acitheca* (Mosbrugger, V.) 40(3): 191-206

*Revision*: Reclassification of *Megalopteris* sp.? Arber (1904) from the Culm Measures of Northwest Devon as *Lesleya* sp. (Leary, R. L.) 30(1-2): 27-32

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*Palynomorphs*: Some remarks on the relation of polyploidy and pollen morphology in the genus *Campanula*, subsection *Heterophylla* (Geslot, A., et al.) 17(3-4): 233-243

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*Paleoecology*: Numerical methods in Quaternary paleoecology; IV, Separating mixtures of morphologically similar pollen taxa (Gordon, A. D., et al.) 23(5): 359-372

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— The effect of pyrite on the tracheid structure of *Drepanophycus spinaeformis*, a long-ranging Devonian lycopod (Hartman, C. M.) 32(2-3): 239-255

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*Holocene*: A palaeobotanical investigation of postglacial deposits in the Sugluk area of northern Ungava (Quebec, Canada) (Bartley, D. D., et al.) 9(1-2): 45-61

— Modeling Holocene changes in the location and abundance of beech populations in eastern North America (Dexter, F., et al.) 50(3): 273-292

*Ordovician*: Chitinozoa from the Vaureal Formation and the Macasty Formation (Upper Ordovician), Anticosti Island, Quebec, Canada (Achab, A.) 25(3-4): 295-314

— Chitinozoans from the lower Arenigian part of the Levis Formation, Quebec, Canada (Achab, A.) 31(1-2): 219-239

— Chitinozoans from the Middle Ordovician of the subsurface of Anticosti Island  
(Achab, A.) 43(1-3): 123-143

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(Achab, A.) 48(1-3): 269-294

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(Givulescu, R.) 36(3-4): 375-378

*Bibliography*: Progress in paleobotanical research on the Tertiary of Romania  
(Givulescu, R.) 29(1-2): 35-48

*Palynomorphs*: Allergy to pollen grains in certain regions of Rumania  
(Popesu, I. G., et al.) 7(1): 55-59

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— The microflora of the Albian "green sands" in the Moesic Platform (Rumania)  
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*Quaternary*: Palynological investigations in the subalpine and alpine zones of the South Carpathian Mountains (Rumania)  
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(Biondi, E.) 34(3-4): 301-320

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— Studies on a new Lower Carboniferous flora from Kingswood near Pettycur, Scotland; I, Preliminary report (Scott, A. C., et al.) 48(1-3): 161-180

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(Edwards, D.) 14(1-2): 77-83

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(El-Saadawy, W. E., et al.) 27(2): 119-147

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(Middeldorp, A. A.) 49(1-2): 1-73

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(Médus, J.) 41(1-2): 31-38

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(Havinga, A. J.) 14(3-4): 319-352

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(Taylor, T. N., et al.) 41(3-4): 319-327

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**Bibliography**: Literature on vegetational history in Latin America; Supplement I  
(Graham, A.) 27(1): 29-52

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(Graham, A.) 37(3-4): 185-223

— Literature on vegetational history in Latin America; Supplement III  
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(Gupta, S.) 24(1): 49-66

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(Rovnina, L. V., et al.) 48(4): 373-376

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(Timofeev, B. V.) 10(1): 79-80

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(Krassilov, V. A., et al.) 36(3-4): 279-295

— Contributions to the knowledge of the Caytoniales  
(Krassilov, V. A.) 24(3): 155-178

— Conifera pollen from the Middle Carboniferous of the Donets Basin  
(Yegorov, A. I., et al.) 1(1-4): 193-200

— New floral structure from the Lower Cretaceous of Lake Baikal area  
(Krassilov, V. A.) 47(1-2): 9-16

— Permian predecessors of the Mesozoic pteridosperms in western Angaraland, U.S.S.R.  
(Meyen, S. V.) 28(2): 191-201

— The genus *Mostotchkia* Chachlov (upper Palaeozoic of Angaraland) and its bearing on the characteristics of the order Dicranophyllales (Pinopsida)  
(Meyen, S. V., et al.) 47(3-4): 205-223

*Palynomorphs*: Microfossils of Lower Cambrian and Precambrian deposits in eastern Siberia  
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— Ordovician Chitinozoa from Tallinn, northern Estonia  
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(Krassilov, V. A., et al.) 32(2-3): 227-237

*Pteridophytes*: Are there ligula and parichnos in Angara Carboniferous lepidophytes?  
(Meyen, S. V.) 14(1-2): 149-157

— Pleuromeia from the Lower Triassic of the Far East of the U.S.S.R.

(Krassilov, V. A., et al.) 19(3): 221-232

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(Grichuk, V. P.) 48(4): 425-434

— The palynological base of stratigraphical subdivision of late Cainozoic deposits of the western Transcaucasus  
(Shatilova, I. I.) 48(4): 409-414

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(Mikhelis, A. A.) 35(2-4): 209-229

— Normapolles pollen in Upper Cretaceous and Paleogene deposits of the Skale Zone of the Carpathians  
(Portnyagina, L. A.) 35(2-4): 231-235

— Special issue: The Normapolles group and province  
(Batten, D. J., et al.) 35(2-4): 125-285

— Tentative botanico-geographical subdivision of northern Asia in Late Cretaceous time  
(Samoylovich, S. R.) 2(1-4): 127-139

— The problem of the Tsagaiansk flora with regard to spore-and-pollen analytical data  
(Bratzeva, G. M.) 2(1-4): 119-126

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(Richardson, J. B., et al.) 34(2): 209-224

*Jurassic*: Palynology in the petroleum geology of western Siberia  
(Rovnina, L. V., et al.) 48(4): 373-376

— Subdivision and correlation of the marine and non-marine Jurassic sediments in Siberia based on palynological evidence  
(Ilyina, V. I.) 48(4): 357-364

*Paleogene*: Normapolles pollen in Cretaceous/Palaeogene boundary deposits of the Priaзов'ye (Azov Sea area)  
(Mikhelis, A. A.) 35(2-4): 209-229

— Normapolles pollen in Upper Cretaceous and Paleogene deposits of the Skale Zone of the Carpathians  
(Portnyagina, L. A.) 35(2-4): 231-235

*Pleistocene*: Glacial floras; their types and stratigraphic significance  
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— Palynological correlation of the flora and vegetation of the Likhvin-Mazovian I-Holstein-Needle Interglacial  
(Ananova, E. N.) 4(1-4): 175-186

*Quaternary*: Correlation peculiarities of pollen zones of the marine and continental upper Quaternary deposits in the Soviet Baltic area  
(Kabailiene, M. V.) 48(4): 435-442

— The study of pollen spectra from Recent and ancient alluvium  
(Grichuk, M. P.) 4(1-4): 107-112

*Silurian*: Distribution of chitinozoans in the late Llandoveryan Rumba Formation (*Pentamerus oblongus* beds) of

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 (Batten, D. J., et al.) 35(2-4): 125-285

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*Plantae:* The taphonomy of land plants in the Orinoco Delta; a model for the incorporation of plant parts in clastic sediments of Late Carboniferous age of Euramerica  
 (Scheibling, M. H., et al.) 41(3-4): 205-240

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 (Muir, M. D.) 5(1-4): 145-154

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 (Salgado-Labouriau, M. L.) 30(3-4): 297-312

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 (Tiffney, B. H., et al.) 22(3): 169-191

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 (Curry, R. P.) 20(1-2): 119-131

*Thallophytes:* Evidence of non-vascular land plants from the Early Silurian (Llandoveryan) of Virginia, U.S.A.  
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 (Edwards, D., et al.) 48(1-3): 241-251

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*Palynomorphs:* A comparison of the structure and sculpture of in situ and dispersed Silurian and Early Devonian spores  
 (Allen, K. C.) 34(1): 1-9

— Stratigraphic palynology of acritarchs from the type area of the Llandovery and the Welsh Borderland  
 (Hill, P. J.) 18(1-2): 11-23

**Pteridophytes:** Studies on Lower Devonian petrifications from Britain; 1, Pyritised axes of Hostinella from the Brecon Beacons Quarry, Powys, South Wales  
 (Edwards, D.) 29(3-4): 189-200

— Studies on Lower Devonian petrifications from Britain; 2, Sennicaulis, a new form genus for sterile axes based on pyrite and limonite petrifications from the Senni Beds  
 (Edwards, D.) 32(2-3): 207-226

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 (Richardson, J. B., et al.) 34(2): 209-224

— Some Lower Devonian microfloras from southern Britain  
 (Mortimer, M. G.) 1(1-4): 95-109

*Oligocene:* A middle Oligocene pollen and spore assemblage from the Bristol Channel  
 (Boulter, M. C., et al.) 28(3-4): 259-272

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 (Atkinson, K., et al.) 11(3-4): 239-250

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 (Janssens, J. A., et al.) 46(1-2): 97-116

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 (Kuhry, P.) 44(3-4): 303-353

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 (van der Burgh, J.) 40(1-2): 33-90

— Some palms in the Miocene of the lower Rhenish Plain  
 (van der Burgh, J.) 40(4): 359-374

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 (van der Burgh, J.) 26(1-4): 173-211

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 (Strel, M.) 5(1-4): 63-74

— Possibilities of correlating wood and pollen data from the Rhenish browncoal  
 (van der Burgh, J.) 5(1-4): 279-284

— Solitary and chain-forming dinoflagellate cysts from the Jurassic of Southwest Germany  
 (Wille, W., et al.) 45(1-2): 121-147

— Taxonomic revision of selected dinoflagellate cysts from the late Bajocian (Middle Jurassic) of North West Germany  
 (Fenton, J. P. G.) 31(3-4): 249-260

*Plantae:* A survey of the fossil flora of the 'Illinger Flözzone' ('Heusweiler Schichten', lower Stephanian, Saar, German Federal Republic)  
 (Boersma, M.) 26(1-4): 41-92

— Woods of the Rhenish brown coal formation; Part 2, Woods from the brown-coal pits "Maria Theresia" at Herzogenrath, "Zukunft West" at Eschweiler and "Victor"

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(van der Burgh, J.) 15(2-3): 73-275

— Wood anatomical investigations of fossilized roots from the Miocene of the Lower Rhine Basin  
(Minnigerode, C., et al.) 48(1-3): 253-268

*Pteridophytes*: *Aphlebia lautneri* nov. sp. from the Rhaetian-Liassic of Franken (G.F.R.)  
(Boersma, M.) 44(1-2): 27-36

— Aspects of Permian palaeobotany and palynology; I, *Sobernheimia jonkeri* nov. gen., nov. sp., a new fossil plant of cycadalean affinity from the Waderner Gruppe of Sobernheim  
(Kerp, J. H. F.) 38(3-4): 173-183

— Aspects of Permian palaeobotany and palynology; III, A new reconstruction of *Lilpopia raciborskii* (Lilpop) Conert et Schaarschmidt (Sphenopsida)  
(Kerp, J. H. F.) 40(4): 237-261

— Aspects of Permian palaeobotany and palynology; V, On the nature of *Asterophyllites dumasii* Zeiller, its correlation with *Calamites gigas* Brongniart and the problem concerning its sterile foliage  
(Kerp, J. H. F.) 41(3-4): 301-317

— *Estinnophyton wahnbachense* comb. nov., a remarkable plant from the Siegenian of Germany  
(Fairon-Demaret, M.) 28(2): 145-160

— *Sphenophyllum miravallis* Vetter and *Bowmanites cupulatus* sp.n. from the "Illinger Flözzone" ("Heusweiler Schichten", lower Stephanian, Saar Basin, German Federal Republic)  
(Hetterscheid, W. L. A., et al.) 40(4): 263-293

— The *Sphenophyllum* species in the Carboniferous flora of Holz (Westphalian D, Saar Basin, Germany)  
(Batenburg, L. H.) 24(2): 69-99

— Vegetative anatomy and ecology of *Sphenophyllum zwickaviense*, *S. emarginatum*, and other "compression species" of *Sphenophyllum*  
(Batenburg, L. H.) 32(2-3): 275-313

**West Germany—Stratigraphy**

*Devonian*: Phytoplankton from the upper Emsian and Eifelian of the Rhineland, Germany; a preliminary report  
(Riegel, W.) 18(1-2): 29-39

— Spore stratigraphy and correlation with faunas and floras in the type marine Devonian of the Ardennes-Rhenish regions  
(Strel, M., et al.) 50(3): 211-229

*Holocene*: Functional palaeoecology of the Hahnenmoor raised bog ecosystem; a study of vegetation history, production and decomposition by means of pollen density dating  
(Middeldorp, A. A.) 49(1-2): 1-73

— Transgression of a raised bog across a coversand ridge originally covered with an oak-lime forest; palaeoecological study of a middle Holocene local vegetational succession in the Amtsven (Northwest Germany)  
(Kuhry, P.) 44(3-4): 303-353

*Permian*: Palynological assemblages from "Saxonian" deposits of the Saar-Nahe Basin (Germany) and the Dome de Barrot (France); an approach to chronostratigraphy  
(Visscher, H., et al.) 17(1-2): 39-56

*Pleistocene*: Palynological correlation of the flora and vegetation of the Likhvin-Mazovian I-Holstein-Neede Interglacial  
(Ananova, E. N.) 4(1-4): 175-186

*Quaternary*: The Late Glacial and Early Postglacial history of vegetation and climate in northwestern Germany  
(Behre, K.) 4(1-4): 149-161

*Triassic*: Aspects of Late Triassic palynology; 3, Palynology of latest Triassic and earliest Jurassic deposits of the northern Limestone Alps in Austria and southern Germany, with special reference to a palynological characterization of the Rhaetian Stage in Europe  
(Schuurman, W. M. L.) 27(1): 53-75

**West Indies** *see also* Bahamas

**West Indies—Paleobotany**

*Bibliography*: Literature on vegetational history in Latin America; Supplement II  
(Graham, A.) 37(3-4): 185-223

*Palynomorphs*: A revision of *Pyrodinium bahamense* Plate (Dinoflagellata)  
(Balech, E.) 45(1-2): 17-34

*Plantae*: Literature on vegetational history in Latin America; Supplement I  
(Graham, A.) 27(1): 29-52

**West Virginia—Paleobotany**

*Algae*: Morphological and chemical examination of *Courvoisiella ctenomorpha* gen. and sp. nov., a siphonous alga from the Upper Devonian, West Virginia, U.S.A.  
(Niklas, K. J.) 21(3): 187-203

*Palynomorphs*: Miospores from the Upper Devonian (Frasnian) Greenland Gap Group, Allegheny Front, Maryland, West Virginia and Virginia, U.S.A.  
(Curry, R. P.) 20(1-2): 119-131

*Pteridophytes*: A reinvestigation of Early Pennsylvanian species of *Mariopteris* from the Appalachian region; II, *Eusphenopteris* and *Sphenopteris*  
(Gastaldo, R. A., et al.) 38(3-4): 227-247

— Anatomy of *Rhacophyton ceratangium* from the Upper Devonian (Famennian) of West Virginia  
(Dittrich, H. S., et al.) 40(1-2): 127-147

**Western Australia—Stratigraphy**

*Triassic*: Triassic palynology of the Carnarvon Basin, Western Australia  
(Dolby, J. H., et al.) 22(2): 105-168

**Western Hemisphere** *see also* Atlantic Ocean; Central America; North America; Pacific Ocean; South America

**Western U.S.** *see also* Alaska; California; Hawaii; Idaho; Montana; Nevada; Oregon; Washington; Wyoming

**Western U.S.—Paleobotany**

*Palynomorphs*: Chronology of Postglacial pollen profiles in the Pacific Northwest (U. S. A.)  
(Hansen, H. P.) 4(1-4): 103-105

**Wisconsin—Paleobotany**

*Palynomorphs*: Estimating plant abundances from pollen percentages; the use of regression analysis  
(Webb, T. , III, et al.) 34(3-4): 269-300

— The pollen-tree relationship within forests of Wisconsin and Upper Michigan, U.S.A.  
(Heide, K. M., et al.) 36(1-2): 1-23

**Wisconsin—Stratigraphy**

*Holocene*: Vegetation and fire history from three lakes with varved sediments in northwestern Wisconsin, U.S.A.  
(Gajewski, K., et al.) 44(3-4): 277-292

**Worms—Annelida**

*Paleozoic*: Cuticular remains associated with scolecodont annelids  
(Taugourdeau, P.) 13(3-4): 233-252

**Worms—Polychaetida**

*Holocene*: Calcite in the mandibles of a marine polychaete  
(Boyer, P. S.) 34(2): 247-250

*Paleozoic*: Polychaetes of the lower and middle Paleozoic; a multi-element analysis and a phylogenetic outline  
(Edgar, D. R.) 43(1-3): 255-284

*Silurian*: Synclinophora synclinalis Eisenack; the oldest arabeliid polychaete  
(Piotr, M.) 43(1-3): 285-292

**Worms—Scolecodonts**

*Jurassic*: Lower Jurassic scolecodonts from the Vicentinian Alps (northeastern Italy), representing the family Dorvileidae Chamberlin, 1919  
(van Erve, A. W.) 34(2): 225-235

*Ordovician*: Calcite in the mandibles of a marine polychaete  
(Boyer, P. S.) 34(2): 247-250

*Tertiary*: Tertiary scolecodont assemblages of the Maranhao continental shelf, Northeast Brazil  
(Regali, M. d. S. P.) 34(2): 237-246

**Wyoming—Paleobotany**

*Palynomorphs*: Modern pollen rain across the Wyoming basins and the northern Great Plains (U.S.A.)  
(McAndrews, J. H., et al.) 9(1-2): 17-43

*Pteridophytes*: Rebuchia ovata, its vegetative morphology and classification with the Zosterophyllophytina  
(Hueber, F. M.) 14(1-2): 113-127

**Yugoslavia—Paleobotany**

*Palynomorphs*: On the forest history of the Dalmatian coast  
(Beug, H. J.) 2(1-4): 271-279

**Zambia—Paleobotany**

*Palynomorphs*: Pollen and spore assemblages in the Luwumbu coal formation (Lower Karroo) of the North Luangwa Valley, Zambia, and their biostratigraphic significance  
(Utting, J.) 21(4): 295-315

**Zoogeography** *see* Biogeography

